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## FAX TRANSMITTAL

|              |  |               |   |
|--------------|--|---------------|---|
| <b>DATE:</b> |  |               |   |
| <b>TO:</b>   | <b>Paul Ip, S.P.E.,<br/>Technology<br/>Center 2800</b> | <b>FROM:</b>  | Donald Hilliard<br>App't Pro Se, 09/839,254 |
| <b>FAX:</b>  | (703) 308-7722   | <b>FAX:</b>   | (520) 628-7131                              |
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| <b>CC:</b>   |  | <b>PAGES:</b> | cover + 1                                   |

### COMMENTS:

Sir,

This fax contains one sheet containing a new independent claim, concerning application # 09/839,254, for your consideration. This claim is intended for replacement of claim 1 of the application, which will be cancelled in the proposed amendment. Thank you for your help in this matter.

Very respectfully,

Don Hilliard  
Applicant Pro Se

TO: Paul IP / S.P.E / GAU 2828  
FAX # 703-746-4313

RECEIVED  
& DISCUSSED  
on 3/4/03

Appl. Ser. No. 09/839,254 (Hilliard) "Circular laser"

FAX to Paul Ip / S.P.E.

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NEW CLAIM

23. A circular laser for sustaining lasing cavity modes with an optical radiation of wavelength,  $\lambda$ , comprising:

- 5 a.) cavity structure means providing a surface of revolution, the surface thereby having a circular aspect;
- b.) a reflective coating deposited on the surface of revolution, the coating providing a circular optical cavity, the optical cavity having a cavity interior with an interior index of refraction, the coating including at least one hundred  
10 thin film dielectric layers, the layers having alternating refractive indices, the alternating refractive indices at least as great as the interior index, the alternating refractive indices differing by less than 0.2, the coating providing greatest reflectance to the radiation at an angle-of-incidence, so that the  
15 coating is substantially reflecting to the radiation only at approximately the angle-of-incidence, such that the radiation only contributes to the modes when the radiation is propagating at approximately the angle-of-incidence;
- c.) an optical gain medium in the cavity interior, the medium disposed for emitting the radiation into the modes; and,
- d.) optical pumping means for excitation of the gain medium.

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It does not seem to be a circular laser  
but more like a circular structure  
with a gain medium in the center